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NOTICE OF ALLOWANCE AND FEE(S) DUE

26304

7590

02/19/2010

KATTEN MUCHIN ROSENMAN LLP
575 MADISON AVENUE
NEW YORK, NY 10022-2585

EXAMINER

HUYNH, NAM TRUNG

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 02/19/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,757	03/25/2004	Masanori Hashimoto	FUYI 21.080	5866

TITLE OF INVENTION: TERMINAL STATE CONTROL SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/19/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

26304 7590 02/19/2010
KATTEN MUCHIN ROSENMAN LLP
575 MADISON AVENUE
NEW YORK, NY 10022-2585

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EXAMINER	ART UNIT	CLASS-SUBCLASS
HUYNHI, NAM TRUNG	2617	455-435100

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____
Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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KATTEN MUCHIN ROSENMAN LLP 575 MADISON AVENUE NEW YORK, NY 10022-2585			HUYNH, NAM TRUNG	
			ART UNIT	PAPER NUMBER
			2617	
DATE MAILED: 02/19/2010				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 137 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 137 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.

10/808,757

Examiner

NAM HUYNH

Applicant(s)

HASHIMOTO ET AL.

Art Unit

2617

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 1/15/10.
2. ☒ The allowed claim(s) is/are 1,2,6-15,21 and 26.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date ____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

DETAILED ACTION

Response to Amendment

This office action is in response to amendment filed on 1/15/10. Of the previously presented claims 1, 2, 5-15, 21, and 26; claim 5 has been cancelled.

Allowable Subject Matter

1. Claims 1, 2, 6-15, 21, and 26 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The invention of the present application pertains to a network system that performs state control of a mobile terminal. The novelty of the claimed invention lies in the combination of components that comprise the terminal status control system and their associated functions and will be further explained below with respect to the independent claims.

Independent claim 1 recites that the terminal status control system in addition to controlling registration of a mobile terminal further comprises a giving unit giving the specific base station the system broadcast information containing a location area identifier for the specific base station that is different from location area identifiers broadcasted in cells adjacent to the cell of specific base station as a location area identifier that the specific base station broadcasts in the cell thereof, and wherein the giving unit is provided in a base station control apparatus that manages and controls the specific base station, the base station control apparatus includes a conversion unit

converting a location area identifier of a location area, to which the specific base station belongs, the location area identifier being received from a location management apparatus managing the location of each terminal existing in the location area, into a unique location area identifier for the specific base station to make the system broadcast information containing the unique location area identifier, wherein the base station control apparatus includes a conversion table for the conversion unit converting the location area identifier managed by the location management apparatus into the unique location area identifier of the specific base station, and the giving unit gives the broadcast information containing the unique location area identifier converted by the conversion unit to the specific base station; and wherein the conversion unit converts the unique location area identifier for the specific base station contained in the location updating request from the terminal, which the base station control apparatus receives the location updating request from the specific base station, into the original location area identifier of the location area by use of the conversion table, in order to transmit the location updating request containing the original location area identifier to the location management apparatus.

Independent claim 6 recites that the terminal status control system in addition to controlling registration of a mobile terminal further comprises a giving unit giving the specific base station a location area identifier for the specific base station that is different from location area identifiers broadcasted in cells adjacent to the cell of the specific base station as a location area identifier that the specific base station broadcasts in the cell thereof, and wherein the giving unit is provided in a base station

control apparatus that manages and controls the specific base station, the base station control apparatus includes a conversion unit converting a location area identifier of a location area, to which the specific base station belongs, contained in broadcast information, which the base station control apparatus receives from a location management apparatus managing the location of each terminal existing in the location area, to which the specific base station belongs, and transfers to the specific base station, into the location area identifier for the specific base station, wherein the location management apparatus includes a management table for managing identification information unique to each terminal, a location area identifier of a location area in which the terminal exists, and a temporary identification information temporarily allocated to the terminal, and the registration table and the judging unit are provided in the location management apparatus, wherein the base station control apparatus adds identification information of the specific base station to the location registration request received from the specific base station, and transmits the location registration request to the location management apparatus, and the judging unit acquires the identification information of the base station from the location registration request received by the location management apparatus as the base station specifying information, and if terminal identification information contained in the location updating request is the terminal temporary identification information, further acquires corresponding identification information unique to the terminal from the management table and judges whether the base station specifying information and the identification information unique to the terminal are registered in the registration table.

Independent claim 10 recites that the terminal status control system in addition to controlling registration of a mobile terminal further comprises a giving unit giving the specific base station a location area identifier for the specific base station that is different from location area identifiers broadcasted in cells adjacent to the cell of the specific base station as a location area identifier that the specific base station broadcasts in the cell thereof, and wherein the giving unit is provided in a base station control apparatus that manages and controls the specific base station, the base station control apparatus includes a conversion unit converting a location area identifier of a location area, to which the specific base station belongs, contained in broadcast information, which the base station control apparatus receives from a location management apparatus managing the location of each terminal existing in the location area, to which the specific base station belongs, and transfers to the specific base station, into the location area identifier for the specific base station, wherein the location management apparatus, when a call termination request to the terminal occurs after the terminal is placed by the control unit under the communicable status using the specific base station, receives an inquiry from a transfer unit of the call termination request concerning a location area corresponding to a transmission destination of the call termination request, acquires the base station specifying information of the specific base station from the registration table, and informs the transfer unit of the identification information of the specific base station along with a corresponding location area identifier, based on the acquired location area identifier and base station specifying information of the specific base station, the transfer unit transmits the call termination

request only to the base station control apparatus that controls the specific base station, and the base station control apparatus, when receives the call termination request, transmits the call termination request to each base station that the base station control apparatus controls.

Independent claim 12 recites that the terminal status control system in addition to controlling registration of a mobile terminal further comprises a giving unit giving the specific base station a location area identifier for the specific base station that is different from location area identifiers broadcasted in cells adjacent to the cell of the specific base station as a location area identifier that the specific base station broadcasts in the cell thereof, and wherein the giving unit is provided in a base station control apparatus that manages and controls the specific base station, the base station control apparatus includes a conversion unit converting a location area identifier of a location area, to which the specific base station belongs, contained in broadcast information, which the base station control apparatus receives from a location management apparatus managing the location of each terminal existing in the location area, to which the specific base station belongs, and transfers to the specific base station, into the location area identifier for the specific base station, wherein the registration table and the judging unit are provided in the base station control apparatus, and the judging unit acquires the identification information of the specific base station managed by the base station control apparatus as the base station specifying information, and if identification information of the terminal contained in the location updating request received from the specific base station by the base station control

apparatus is temporary identification information, acquires identification information unique to the terminal by inquiring of the terminal, and judges whether the base station specifying information and the identification information unique to the terminal are registered in the registration table, wherein after the terminal is placed by the control unit under the communicable status using the specific base station, when a call termination request to the terminal is received, the base station control apparatus acquires the base station specifying information of the specific base station corresponding to the identification information of the terminal contained in the call termination request from the conversion table and transmits the call termination request only to the specific base station based on the acquired base station specifying information.

Independent claim 15 recites that the terminal status control system in addition to controlling registration of a mobile terminal further comprises a giving unit giving the specific base station a location area identifier for the specific base station that is different from location area identifiers broadcasted in cells adjacent to the cell of the specific base station as a location area identifier that the specific base station broadcasts in the cell thereof, and wherein the giving unit is provided in a base station control apparatus that manages and controls the specific base station, the base station control apparatus includes a conversion unit converting a location area identifier of a location area, to which the specific base station belongs, contained in broadcast information, which the base station control apparatus receives from a location management apparatus managing the location of each terminal existing in the location

area, to which the specific base station belongs, and transfers to the specific base station, into the location area identifier for the specific base station, wherein with respect to a handover request from another base station control apparatus, the base station control apparatus that controls the specific base station judges whether a terminal that is a target of the handover request is the terminal allowed to use the specific base station based on registration contents of the registration table, wherein if the target terminal is the allowed terminal, the base station control apparatus approves the handover request, and if not, rejects the handover request, wherein when call origination from the terminal is received, the another base station control apparatus acquires the identification information unique to the terminal from the terminal, adds the identification information unique to the terminal to the handover request from the terminal, and transmits the handover request to the base station control apparatus that controls the specific base station, and the base station control apparatus controlling the specific base station acquires the identification information unique to the terminal necessary to perform the judging processing from the handover request.

Applicant's independent claims comprise a particular combination of elements neither taught nor suggested by the prior art. Accordingly, Applicant's claims are allowed for the reasons and for the reasons recited by the Applicant in the amendment filed on 1/15/10.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAM HUYNH whose telephone number is (571)272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nam Huynh/
Examiner, Art Unit 2617

/George Eng/

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Art Unit: 2617

Supervisory Patent Examiner, Art Unit 2617